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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/551,860	PETERSSON ET AL.
	Examiner	Art Unit	
	CANDAL ELPENORD	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
> WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
>   after SIX (6) MONTHS from the mailing date of this communication.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
>   Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
>   earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>11 September 2006</u>.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-34</u> is/are pending in the application.

   4a) Of the above claim(s) <u>15-22</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-14, 23-34</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>03 October 2005</u> is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☒ All   b) ☐ Some *   c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date *See Continuation Sheet*.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :03 October 2005, 12 January 2007.

DETAILED ACTION

Election/Restrictions

1.   During a telephone conversation with Sidney Weatherford on March 25, 2008 a

provisional election was made without traverse to prosecute the invention of group 1

consisting of claims 1-14 and group 3 consisting of claims 23-34. Affirmation of this

election must be made by applicant in replying to this Office action. Claims 15-22

withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn

to a non-elected invention.

Drawings

2.   Figure 1 should be designated by a legend such as --Prior Art-- because only

that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in

compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

abandonment of the application. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

Abstract Objection

3.   The abstract of the disclosure is objected to because the phrase "disclosed" is

improper language. Correction is required. See MPEP § 608.01(b).

4.   Applicant is reminded of the proper language and format for an abstract of the
disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   **Claims 1-2, 4-14** are rejected under 35 U.S.C. 102(b) as being anticipated by

Gronberg et al (WO 2002/052800 A1).

Regarding claim 1, Gronberg et al. discloses a method for controlling the

transmission flow rate of data bits ("the packet control unit controls the down link flow of

frames according to a flow control algorithm", recited in page 5, lines 23-28) in a data bit

transfer session from a serving entity (fig. 2, "serving SGSN 203", recited in page 7,

lines 15-20) to a client (fig. 2, GPRS mobiles MS1, MS2, recited in page 7, lines 15-18),

the session involving bit transfer over a wireless communications link (fig. 2, "Air",

recited in page) , the method ("the packet control unit controls the down link flow of

frames according to a flow control algorithm", recited in page 5, lines 23-28) comprising:

setting up the session by providing a radio control node ("a packet control unit in the

base station subsystem", recited in page 5, lines 23-26) to establish flow rate

parameters ("computes of real leak rate for each down link flow", recited in page 5, lines

27-31) relating to the wireless link ("rate value for downlink flow", recited in page 5, lines

29-30), wherein the setting up includes: resolving addressing ("the packet control units

computes a new leak value then the computed parameter value is sent to the serving

SGSN node", recited in page 5, lines 27-36) between the radio control node (fig. 2,

Packet Control Unit) and the serving entity (fig. 2, "serving SGSN 203", recited in page

7, lines 15-20), sending rate control configuration parameters ("parameter value, flow

control message", recited in page", recited 31-34) to the radio control node (fig. 2,

Packet Control Unit), generating in the radio control node (fig. 2, Packet Control Unit)

an initial rate control (RC) message including initial flow rate parameters ("parameter

value computed by the packet control unit included in flow control information", recited

in page 5, lines 27-34) , sending at least one initial rate control message ("flow control

message sent by the packet control unit", recited in page 5, lines 27-34) to allow the

serving entity (fig. 2, "serving SGSN 203", recited in page 7, lines 15-20) to set initial

transmission rates for the session in accordance with at least one of the initial flow rate

parameters ("the serving SGSN node adjusts its transmission rate", recited in page 5,

lines 34-36); monitoring the wireless communication link ("the packet control unit

counts number of bytes transmitted over the interface", recited in page); based on

monitoring ("the packet control unit counts number of bytes transmitted over the

interface", recited in page), sending new flow rate parameters ("in a flow control

message, the serving SGSN is informed of the new parameters", recited in page 7,

lines 33-36, "flow control messages to the serving entity", recited in page 6, lines 1-5) so

that the serving entity (fig. 2, "serving SGSN 203", recited in page 7, lines 15-20) can

update the transmission rate of the session in accordance with the new rate control

parameters ("the serving GPRS support node adjust its transmission rate for each data

flow according to instructions received from the packet control unit", recited in page 5,

lines 34-36).

     Regarding claim 2, Gronberg et al. discloses the method ("the packet control

unit controls the down link flow of frames according to a flow control algorithm", recited

in page 5, lines 23-28) further comprising examining ("the packet control unit counts the

amount of data that has crossed the interface", recited in page 111, lines 10-18), by the

radio control node ("packet control unit in the base station subsystem of fig. 2"), every

message header in the flow ("identification of the flow", recited in page 13, lines 1-8)

between the client (fig. 2, Mobile Station/MS 1) and the serving entity (fig. 2, Serving

SGSN entity 203) to obtain rate control configuration parameters within the examined

messages ("flow control message", recited in page 13, lines 1-8).

     Regarding claim 4, Gronberg et al. discloses the method ("the packet control

unit controls the down link flow of frames according to a flow control algorithm", recited

in page 5, lines 23-28) further comprising: initiating a session, by the client ("mobile

station receiving data from the GPRS network", recited in page 11, lines 10-12), by

sending an application layer command to the serving entity ("the serving entity SGSN is informed of the new values", recited in page 11, lines 3-5), sending, by the serving entity a transport layer command to the client (fig. 2, Mobile Station 2), examining, by the radio control node (fig. 2, Packet Control Unit of the base station subsystem), headers of transport layer commands from the serving entity (fig. 2, Serving SGSN node) to obtain rate control configuration parameters within the transport layer command ('the packet control unit estimate the real transmission rate for each downlink data flow", recited in page 11, lines 12-18), sending, by the radio control node (fig. 2, Packet Control Unit of the base station subsystem), a rate control feed back in response to finding rate control configuration parameters in the transport layer command ("the packet control unit transmit a flow control message to the SGSN after determining new value for a data flow", recited in page 13, lines 1-4).

   Regarding claim 5, Gronberg et al. discloses the method ("the packet control unit controls the down link flow of frames according to a flow control algorithm", recited in page 5, lines 23-28) of claim 1 wherein the setting up further comprises: initiating the session according to an application level protocol ("the packet control unit controls the down link flow according to BSSGP flow control", recited in page 11, lines 1-5), receiving, by the radio control node (fig. 2, Packet Control Unit), the rate control configuration parameters according to a first intermediate layer protocol ("the packet control unit controls the downlink according to a Base Station Subsystem GPRS Protocol", recited in page 11, lines 1-5); tying the first intermediate layer control configuration parameters to parameters according to a second intermediate layer

protocol ("the packet control unit segmenting the data packets in RLC blocks suitable for down link transmission", recited in page 7, lines 28-30, "the packet control unit estimates the real transmission rate for downlink flow", recited in page 11, lines 12-18); generating the tied parameters; and including the tied parameters in the initial rate control message ("the packet control unit transmit a flow control message to the SGSN after determining new value for a data flow", recited in page 13, lines 1-4).

Regarding claim 6, Gronberg et al. discloses the method ("the packet control unit controls the down link flow of frames according to a flow control algorithm", recited in page 5, lines 23-28) of claim 1 wherein the setting up further comprises: initiating the session ("mobile stations receiving data", recited in page 10-14) according to an application level protocol ("the serving SGSN sends a data packet to GPRS mobile Station, the packet is then buffered in the Packet Control Unit", recited in page 10, lines 21 page 11, lines 5), receiving (fig. 2, see, packet control unit receiving over the Gigabit interface from SGSN, flow control algorithm of the BSS", recited in page 11, lines 1-5), by the radio control node (fig. 2, Packet Control Unit), the rate control configuration parameters according to an intermediate layer protocol; sending the initial rate to the rate control IP address ("identification of data flow selected", recited in page 14, lines specified in the configuration parameters ("flow control message which includes identification of data flow in question", recited in page 13, lines 1-8).

Regarding claim 7, Gronberg et al. discloses the method ("the packet control unit controls the down link flow of frames according to a flow control algorithm", recited

in page 5, lines 23-28) of claim 5 further comprising activating an intermediate layer
information set ("the packet control unit indicates to the network node the actual
transmission rate of data flow", recited in abstract, lines 6-11) between the client (fig. 2,
Mobile Station MS1, MS2) and a serving support node (fig. 2, SGSN 203) in the network
(fig. 2, GSM/GPRS Network).

Regarding claim 8, Gronberg et al. discloses the method ("the packet control
unit controls the down link flow of frames according to a flow control algorithm", recited
in page 5, lines 23-28) of claim 1 wherein the serving entity (fig. 2, serving SGSN 203)
is an application server ("the packet control unit indicates to the network node the actual
transmission rate of data flow", recited in abstract, lines 6-11).

Regarding claim 9, Gronberg et al. discloses the method ("the packet control
unit controls the down link flow of frames according to a flow control algorithm", recited
in page 5, lines 23-28) of claim 1 wherein the serving entity (fig. 2, SGSN 203) is a
proxy in communication with an application server (FIG. 2, gateway GPRS support node
"GGSN", routes packets to the serving entity SGSN", recited in page 7, lines 15-18).

Regarding claim 10, Gronberg et al. discloses the method ("the packet control
unit controls the down link flow of frames according to a flow control algorithm", recited
in page 5, lines 23-28) of claim 1 wherein the client is a mobile station (fig. 2, GPRS
mobiles 201, recited in page 7, lines 15-16).

   Regarding claim 11, Gronberg et al. discloses the method ("the packet control unit controls the down link flow of frames according to a flow control algorithm", recited in page 5, lines 23-28) of claim 1 wherein the rate control configuration parameters are selected from the group consisting of a rate control method indicator, a rate control identifier, a rate control IP address, and rate control port numbers.

   Regarding claim 12, Gronberg et al. discloses the method ("the packet control unit controls the down link flow of frames according to a flow control algorithm", recited in page 5, lines 23-28) of claim 1 wherein the flow rate parameters ("parameters values are specific for each data flow", recited in page 8, lines 18-20) are selected from the group consisting of a rate control identifier ("the rate at which the serving entity is allowed to transmit within a given flow, it has certain default value", recited in page 8, lines 25-28) and a bit rate ("leak rate R", recited in page 8, lines 21-22).

   Regarding claim 13, Gronberg et al. discloses the method ("the packet control unit controls the down link flow of frames according to a flow control algorithm", recited in page 5, lines 23-28) wherein the application layer protocol is the Real Time Streaming Protocol (RTSP), the first intermediate protocol is Radio Access Network Application Part (RANAP) (fig. 1, fig. 2, "GSM/GPRS network", recited in page 7, 10-13), and the second intermediate protocol is Iu UP or GTP over IP (fig. 1, fig. 2, "GB and GN interface", recited in page 7, lines 16-18).

   Regarding claim 14, Gronberg et al. discloses the method ("the packet control unit controls the down link flow of frames according to a flow control algorithm", recited

in page 5, lines 23-28) of claim 1 wherein the session occurs within a network which is a

Universal Mobile Telephony System (UMTS) fig. 1 fig. 2, GSM Network, recited in page

6, lines 31-34, page 7, lines 10-13), a General Packet Radio Service (GPRS) system

(fig. 2, GPRS network), or a WLAN network.

<ins>Second Set of Rejection</ins>

7.   **Claim 1** is rejected under 35 U.S.C. 102(e) as being anticipated by Bedekar et al

(US 7,047,310 B2).

        Regarding claim 1, Bedekar et al. discloses a method for controlling the

transmission flow rate ("flow control mechanism that controls a rate at which data is

transferred", recited in col. 6, lines 37-43) of data bits ("the rate at which a node conveys

data to packet control unit is premised on a rate of data over", recited in col. 6, lines 15-

19) in a data bit transfer session from ("data transferred by node 202 (as the serving

SGSN) to packet control unit", recited in col. 6, lines 15-19) a serving entity (fig. 2, Node

202 as the serving SGSN node, recited in col. 5, lines 22-30) to a client (fig. 2, Mobile

Station 224, recited in col. 5, lines 4-16) the session involving bit transfer ("mobile

Station establishing a data communication", recited in col. 5, lines 57-66) over a

wireless communications link (fig. 2, Air Interface 222, recited in col. 5, lines 4-16), the

method comprising: setting up the session ("node 210 determines a desired data rate

in bits per second", recited in col. 6, lines 52-59) by providing a radio control node (fig.

2, Packet Control Unit 210 (Node 210) to establish flow rate parameters ("the node

embeds the desire data transfer rate and then conveys to node 202 flow control

message", recited in col. 6, lines 52-59) relating to the wireless link (fig. 2, Air Interface 222, recited in col. 5, lines 4-16), wherein the setting up includes: resolving addressing between the radio control node (fig. 2, Packet Control Unit 210) and the serving entity (fig. 2, Node 202), sending rate control configuration parameters ("adjusting by the serving node", "implements the desired data rate", recited in col. 8, lines 16-24) to the radio control node (fig. 2, Packet Control Node 210), generating ("each parameter of flow control parameters may be freshly calculated", recited in col. 7, lines 56-63) in the radio control node (fig. 2, Packet Control Unit 210) an initial rate control (RC) message including initial flow rate parameters ("flow control parameters", recited in col. 7, lines 56-63), sending at least one initial rate control message ("upon receiving the flow control message", recited in col. 8, lines 16-20) to allow the serving entity (fig. 2, Nodes 202) to set initial transmission rates for the session in accordance with at least one of the initial flow rate parameters ("adjusting by the serving node", "implements the desired data rate", recited in col. 8, lines 16-24); monitoring the wireless communication link ("change of data rate over the interface", recited in col. 10, lines 55-58); based on monitoring sending new flow rate parameters ('second flow message', recited in col. 10, lines 33-35, "dynamically adjust a rate at which flow control messages are conveyed to node 202", recited in col. 10. 39-46) so that the serving entity (fig. 2, Node 202) can update the transmission rate of the session in accordance with the new rate control parameters ("node 202 adjusts the data rate corresponding based on the desired data rate", recited in col. 10, lines 33-41).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating
        obviousness or nonobviousness.

10.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

11.   **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over

Gronberg et al (WO 2002/052800 A1) in view of Chou et al (US 2003/0018796 A1).

   Regarding claim 3, Gronberg et al. discloses the method ("the packet control

unit controls the down link flow of frames according to a flow control algorithm", recited

in page 5, lines 23-28) of claim 2 further comprising: activating an intermediate layer

information set ("the packet control unit indicates to the network node the actual

transmission rate of data flow", recited in abstract, lines 6-11) between the client (fig. 2,

Mobile Station MS1, MS2) activating an intermediate layer information set between the

client (fig. 2, Mobile Station/MS 2) and a gateway node (fig. 2, GGSN node 202);

sending ("GGSN routes data packets over the air interface to the serving SGSN",

recited in page 7, lines 15-20), by the gateway node (fig. 2, GGSN node 202) an

application layer message to the serving entity (fig. 2, serving SGSN node 203);

receiving, by the radio control node (fig. 2, Packet Control Unit), a radio control initiation

message ("transmission rate adjustment", recited in page 5, lines 34-36) from the

serving entity (fig. 2, serving SGSN node), to allow the radio control node (fig. 2, Packet

Control Unit) to send messages to the serving entity (fig. 2, serving SGSN node); and

sending, by the radio control node (fig. 2, Packet Control Unit 208), a rate control

message ("flow control message", recited in page 5, lines 31-36, "leak rate corresponds

to rate", recited in page 8, lines 25-28) to the serving entity (fig. 2, serving SGSN node

203), wherein the rate control message ("flow control message", recited in page 5, lines

31-36) contains flow rate parameters ("the parameter value computed is sent to the

serving SGSN node", recited in page 5, lines 30-36).

Gronberg et al. is silent with regard to the claimed features: including the IP address of the client;   including the IP address of the serving entity including the IP address of the client; including the IP address of the serving entity.

Chou et al. from the same field of endeavor discloses the above claimed features: including the IP address of the client ("the service module transmits information using the source and port address associated with the client", recited in paragraph 12-18);   including the IP address of the serving entity ("source and port address of the server", recited in paragraph 0029, lines 12-21); including the IP address of the client ("the service module transmits information using the source and port address associated with the client", recited in paragraph 12-18); including the IP address of the serving entity ("source and port address of the server", recited in paragraph 12-21).   Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the features of Gronberg et al. by using features as taught by Chou et al. in order to provide flow control associated with the downlink channel using the IP address which reduces the possibility of congestion at the air interface.

12.   **Claims 23-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou et al (US 2003/0018796 A1) in view of Gronberg et al (WO 2002/052800 A1).

Regarding claim 23, Chou et al. discloses a method for controlling ("flow control to regulate the data transmission", recited in paragraph 0015, lines 1-8) the transcoding rate ("the multimedia information is transcoded", recited in paragraph 0011, lines 4-12)

of a media gateway (fig. 1A, Gateway 160, recited in paragraph 0025, lines 13-21)

during a data bit transfer session from the media gateway (fig. 1A, Gateway 160, recited

in paragraph 0025, lines 13-21, "enables information to be transceived between the

clients", recited in paragraph 0025, lines 18-23)) to a client (fig. 1B, Wireless Clients

110, recited in paragraph 0025, lines 20-24), the bit transfer session involving bit

transfer ("the information is transmitted to the wireless client over the wireless channel",

recited in paragraph 0025, lines 23-28) over a wireless communications link ("the

available transmission rate of the downlink channel", recited in paragraph 0011, lines 9-

13), the method comprising: to establish transcoding rate parameters (fig. 1B, 3A,

"service Module 190, the service module may configured to transcode multimedia

communicated from the server to wireless client to conform to the available

transmission rate of the down link channel", recited in paragraph 0028) to the wireless

link (fig. 1B, Wireless Channel 115, recited in paragraph 0026, lines 1-7) wherein the

setting up includes: resolving addressing ("the service module may configured to

transmit information to the server using the source address and source port address

associated with the wireless client and transmits the transcoded information to the

wireless client using the source address and source port address associated with the

server", recited in paragraph 0029, lines 12-21) between the radio control node (fig. 1B,

fig. 3A, Service Module 190, recited in paragraph 0029, lines 6-12) and the media

gateway (fig. 3A, Server 180, recited in paragraph 0029, lines 6-12), initial transcoding

rate parameters (fig. 3A, Transcode 355, "estimate of multimedia information to

conform with the available transmission rate of the downlink channel", recited in

paragraph 0028) sending at least one initial rate control message so that the media

gateway (fig. 3A, Service Module 190) can set initial transcoding rates for the session in

accordance with at least one of the initial transcoding rate parameters ("the service

module configured to transcode the multimedia information communicated from the

server to the client to conform with available transmission rate of the down link channel",

recited in paragraph 0028); monitoring the wireless communication link ("intercepting of

multimedia information between transmitter and a receiver where the information is

encoded at a first transmission rate", recited in paragraph 0011); based on monitoring

('if the first transmission rate is greater than the available transmission rate", recited in

paragraph 0011), sending new transcoding rate parameters so that the media gateway

(fig. 3A, Service Module 190) can update the transmission rate of the session in

accordance with the new transcoding rate parameters ("the service module in operation,

may be configured to transcode the multimedia information from the server to the client

to conform to the available transmission rate of the downlink channel', recited in

paragraph 0028)..

Regarding claim 24, Chou et al. discloses the method ("flow control to regulate

the data transmission", recited in paragraph 0015, lines 1-8) of claim 23 further

comprising examining (fig. 3A, IP Filter Layer 322, recited in paragraph 0033, lines 6-

14), by the radio control node, every message header in the flow ("classifying the

received packet in accordance with classification rules between the client (fig. 3A,

Wireless Client 110) and the media gateway (fig. 3A, Service Module 190) to obtain rate

control configuration parameters within the examined messages ("determining whether
the packet header corresponds to the transcoding services provided by the service
module", recited in paragraph 0033, lines 9-18).

Regarding claim 25, Chou et al. discloses the method further comprising:
activating an intermediate layer information set between the client (fig. 1B, Wireless
Client 110) and a gateway node (fig. 1B, GGSN 150) in the network (fig. 1B, GPRS
network); sending, by the gateway node (fig. 1B, GGSN 150), an application layer
message to the media gateway, including the IP address of the client ("the service
module transmits information using the source and port address associated with the
client", recited in paragraph 12-18); including the IP address of the media gateway ("the
service module transmits information using the source and port address associated with
the client", recited in paragraph 12-18) , the media gateway to allow the radio control
node to send messages to the media gateway.

Regarding claim 26, Chou et al. discloses the method further comprising:
initiating a session, by the client (fig. 3A, Wireless Client 110), by sending an application
layer command to the media gateway, sending, by the media gateway (fig. 3A, Service
Module 190), a transport layer command to the client (fig. 3A, Wireless Client 110)
wherein the transport layer command includes rate control configuration parameters
("the service module transmit the transcoded multimedia information to the wireless
client", recited in paragraph 0028, lines 15-21).

Regarding claim 29, Chou et al. the method ("flow control to regulate the data transmission", recited in paragraph 0015, lines 1-8) of claim 27 further comprising activating an intermediate layer information set between the client (fig. 1B, fig. 3A, Wireless Client 110) and a serving support node (fig. 1B, SGSN 140) in the network (fig. 1B, Wireless Data Backbone Network).

Regarding claim 30, Chou et al. discloses the method ("flow control to regulate the data transmission", recited in paragraph 0015, lines 1-8) of claim 23 wherein the client (fig. 1B, Wireless Client 110).

Regarding claim 31, Chou et al. discloses the method ("flow control to regulate the data transmission", recited in paragraph 0015, lines 1-8) of claim 23 wherein the rate control configuration parameters (fig. 3, Classification Rules 330, recited in paragraph 0033, lines 9-14) are selected from the group consisting of a rate control method indicator, a rate control identifier, a rate control IP address ("determines whether the packet corresponds to the transcoding service", recited in paragraph 0033, lines 6-14), and rate control port numbers ("port used for designating web-based service requests", recited in paragraph 0033, lines 20-26).

Regarding claim 32, Chou et al. discloses the method ("flow control to regulate the data transmission", recited in paragraph 0015, lines 1-8) of claim 23 wherein the

transcoding rate parameters are selected from the group consisting of a rate control

identifier ("smoothed congestion window parameter associated with downlink channel",

recited in paragraph 0028) and a bit rate ("first transmission rate", recited in paragraph

0011).

   Regarding claim 34, Chou et al. discloses the method ("flow control to regulate

the data transmission", recited in paragraph 0015, lines 1-8) of claim 23 wherein the

session occurs within a network which is a Universal Mobile Telephony System

(UMTS), a General Packet Radio Service (GPRS) system (fig. 1B, Wireless backbone

network that employs GPRS architecture, recited in paragraph 0025, lines 1-10), or a

WLAN network.

   Chou et al. discloses al the claimed limitation with the exception of being silent

with respect to the following features: **regarding claim 23**, setting up the session by

providing a radio control node, resolving addressing between the radio control node and

the media gateway, sending rate control configuration parameters to the radio control

node; **regarding claim 24,** examining, by the radio control node, every message

header in the flow between the client and the media gateway to obtain rate control

configuration parameters within the examined messages; **regarding claim 25**, and

receiving, by the radio control node, a rate control initiation message, including the IP

address of the media gateway to allow the radio control node to send messages to the

media gateway; **regarding claim 26**, and examining, by the radio control node, the

headers of transport layer commands to obtain rate control configuration parameters

within the transport layer commands; **regarding claim 27**, initiating the session

according to an application level protocol, receiving, by the radio control node, the rate

control configuration parameters according to a first intermediate layer protocol; tying

the first intermediate layer control configuration parameters to parameters according to

a second intermediate layer protocol; generating the tied parameters; and including the

tied parameters in the initial rate control message; **regarding claim 28**, initiating the

session according to an application level protocol, receiving, by the radio control node,

the rate control configuration parameters according to an intermediate layer protocol;

sending the initial rate to the rate control IP address specified in the configuration

parameters; **regarding claim 30**, wherein the client is a mobile station; **regarding

claim 31**, wherein the rate control configuration parameters are selected from the

group consisting of a rate control method indicator, a rate control identifier.

Gronberg et al. from the same field of endeavor discloses the above claimed

features: **regarding claim 23**, setting up the session ("receives of data frames from an

external network", recited in page 23-28) by providing a radio control node (fig. 2,

Packet Control Unit), resolving addressing ("the packet control units computes a new

leak value, then the computed parameter value is sent to the serving SGSN node",

recited in page 5, lines 27-36) between the radio control node (fig. 2, Packet Control

Unit) and the media gateway, sending (fig. 2, see, packet control unit receiving over the

Gigabit interface from SGSN) rate control configuration parameters ("flow control

algorithm of BSSSGP", recited in page 11, lines 1-5) to the radio control node (fig. 2,

Packet Control Unit 208); **regarding claim 24**, examining ("the packet control unit

counts the amount of data that has crossed the interface", recited in page 111, lines 10-18), by the radio control node ("packet control unit in the base station subsystem of fig. 2"), every message header in the flow ("identification of the flow", recited in page 13, lines 1-8) between the client (fig. 2, Mobile Station/MS 1) and the serving entity (fig. 2, Serving SGSN entity 203) to obtain rate control configuration parameters within the examined messages ("flow control message", recited in page 13, lines 1-8); examining, by the radio control node, every message header in the flow between the client and the media gateway (fig. 2, gateway GGSN, recited in page 2, lines 5-7, page 7, lines 15-18) to obtain rate control configuration parameters within the examined messages ("the packet control unit counts the amount of data that has crossed the air interface", recited in page 11, lines 10-18)**; regarding claim 25**, and receiving (fig. 2, see, packet control unit receiving over the Gigabit interface from SGSN) by the radio control node (fig. 2, Packet Control unit) , a rate control initiation message, including the IP address of the media gateway to allow the radio control node (fig. 2, Packet Control Unit) to send messages to the media gateway; **regarding claim 26**, and examining, by the radio control node (fig. 2, packet control unit of BSS), the headers of transport layer commands to obtain rate control configuration parameters ("the flow control parameters are updated for each downlink flow", recited in page 7, lines 31-36) within the transport layer commands ("the packet control units counts the amount of data transmitted over the air interface', recited in page 7, lines 31-36); **regarding claim 27**, initiating the session (fig. 2, "each time a downlink flow is established", recited in page 14, lines 7-11) according to an application level protocol ("each time a downlink flow is established",

recited in page 14, lines 7-11), receiving (fig. 2, see, packet control unit receiving over

the Gigabit interface from SGSN), by the radio control node (fig. 2, Packet control unit of

BSS), the rate control configuration parameters ("flow control parameters", recited in

page 7, lines 31-36) according to a first intermediate layer protocol ("the packet control

unit controls the downlink flow of LLC frames according to a BSSGP flow control

algorithm", recited in page 11, lines 1-5); tying the first intermediate layer control

configuration parameters ("flow control", recited in page 11, lines 1-5) to parameters

according to a second intermediate layer protocol ("the packet control unit estimates the

real transmission rate", "the amount of data crossing the air interface", recited in page

11, lines 10-18); generating the tied parameters ("flow control parameter values are

updated", recited in page 11, lines 1-5); and including the tied parameters in the initial

rate control message ("the packet control unit transmit a flow control message", recited

in page 13, lines 1-8); **regarding claim 28**, initiating the session according to an

application level protocol ("GPRS mobiles receiving data", recited in page 11, lines 10-

18), receiving, by the radio control node (fig. 2, packet control unit) , the rate control

configuration parameters according to an intermediate layer protocol; sending the initial

rate to the rate control IP address ("the flow control message includes identification of

data flow", recited in page 13, lines 1-8) specified in the configuration parameters ("the

packet control unit transmit a flow control message", recited in page 13, lines 1-8);

regarding claim 30, wherein the client (fig., 2, Mobiles 201) is a mobile station (fig. 2,

see MS 1, MS 2 connecting to the air interface); **regarding claim 31**, **regarding claim

31**, wherein the rate control configuration parameters are selected from the group

consisting of a rate control method indicator ("the rate at which the SGSN is allowed to

transmit", recited in page 8, lines 24-28), a rate control identifier ("identification of the

data flow", recited in page 13, lines 1-8). Therefore, it would have been obvious to one

of ordinary skill in the art at the time the invention was made to modify the features of

Chou et al. by using features as taught by Gronberg et al. in order to provide adjustment

of data flow over the air interface which in turns reduces congestion (See page 5, lines

23-36 for motivation).

13.   **Claim 33** is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou et

al (US 2003/0018796 A1) in view of Gronberg et al (WO 2002/052800 A1) as applied to

claim 23 above, and further in view of Dorenbsoch et al (2003/0095510 A1).

        Chou et al. discloses the first intermediate protocol is Radio Access Network

Application Part (RANAP) (fig. 1B, GPRS network).

 Gronberg et al. discloses the second intermediate protocol is Iu UP

        all the claimed limitation with the exception of being silent with regard to the

claimed features: 33. The method of claim 23 wherein the application layer protocol is

the SIP [Session Initiated Protocol], the first intermediate protocol is Radio Access

Network Application Part (RANAP), and the second intermediate protocol is Iu UP (fig.

1, fig. 2, "GB and GN interface", "air interface", recited in page 7, lines 16-18).

        Chou et al. and Gronberg et al. are silent with regard to the wherein the

application layer protocol is the SIP [Session Initiated Protocol].

Dorenbsoch et al from the same field of endeavor discloses the wherein the application layer protocol is the SIP [Session Initiated Protocol], ("session initiation protocol for call set-up purposes", recited in paragraph 0016). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the features of Chou et al. with Gronberg et al. in order to provide call registration using SIP (See paragraph 0019 for motivation).

14.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Curcio et al (US 7,346,007 B2), and Barany et al (US 2001 /0043577 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CANDAL ELPENORD whose telephone number is (571)270-3123. The examiner can normally be reached on Monday through Friday 7:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Bin Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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